

Abstract

Name of diploma thesis: Physical activity and body composition in patients with ankylosing spondylitis

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Target: The findings the size of physical activity and body composition in the groups of patients with ankylosing spondylitis with different duration of disease and subsequent comparison of the size of physical activity with selected health recommendations for a healthy population.

Methods: The sample consists of participants (10 women and 36 men, $n = 46$, 42.8 ± 11.3 years old) with clinically diagnosed disease ankylosing spondylitis who have been outpatiently visiting Rheumatology institute in Prague. The sample was divided into three groups according to the duration of disease (1st group 0-6 years, 2nd group 7-14 years, 3rd group 3-15 years). Accelerometer ActiGraph GT3X was used for determine the size of weekly physical activity. Bioelectrical impedance using a BIA 2000 was used to assess the body composition.

Results: From the perspective of the physical activity health recommendations all three groups met health recommendation for minimum amount of moderate-intensity physical activity throughout the week (150 minutes). Neither group, however, did not meet health recommendation for minimum average daily number of steps (10 000 steps). First group achieved significantly higher values in the average number of steps per week and working days compared with the second group ($d = 0.60$ resp. 0.57). There were no significant differences in other indicators of physical activity between the groups. According to the values of indicators of physical activity the first group appeared as the most physically active. Based on the results of physical activity it is evident that all three groups are sufficiently physically active, which is positively reflected in indicator of body composition "percentage of body fat". There were no significant differences in the assessment of body composition between the groups.

Relatively non significant differences in the values of physical activity and body composition indicators between the groups point out that the duration of the disease in our study did not confirm as the factor significantly influencing weekly physical activity or current body composition.

Key words: physical activity, intensity, steps, body fat, ankylosing spondylitis, health recommendations